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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,360	03/10/2004	Marc Alan Herwald	2003-0837.02	4342

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LEXMARK INTERNATIONAL, INC.
INTELLECTUAL PROPERTY LAW DEPARTMENT
740 WEST NEW CIRCLE ROAD
BLDG. 082-1
LEXINGTON, KY 40550-0999

EXAMINER

UHLENHAKE, JASON S

ART UNIT	PAPER NUMBER
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2853

MAIL DATE	DELIVERY MODE
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07/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/797,360

Applicant(s)

HERWALD ET AL.

Examiner

Jason Uhlenhake

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-12 and 25-35 is/are allowed.
- 6) ☒ Claim(s) 1, 14, 18, 21, 24, 37 and 41-45 is/are rejected.
- 7) ☒ Claim(s) 13, 15-17, 19-20, 22-23, 36, 38-40, 46 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

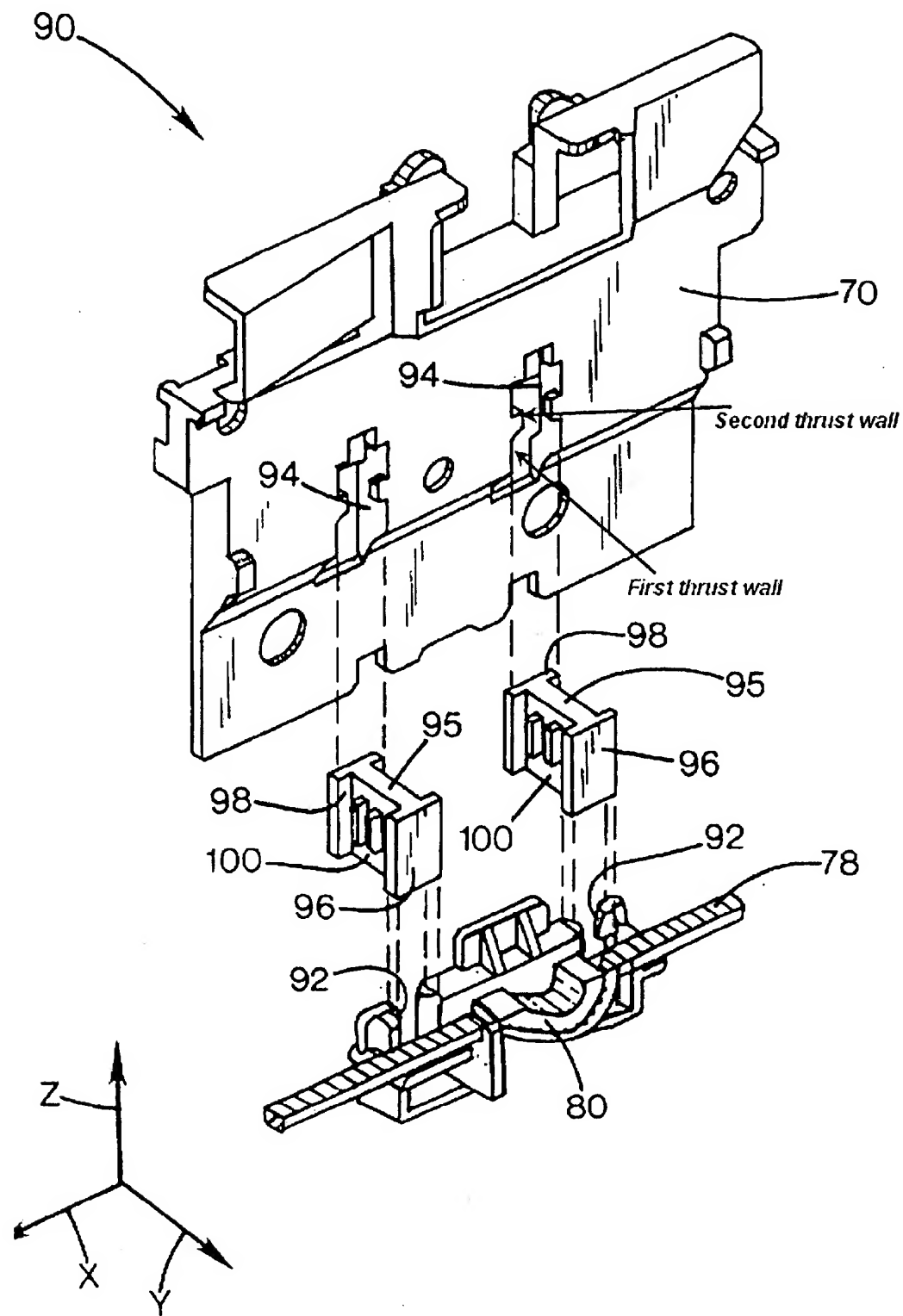
Claims 1, 14, 18, 21, 24, 37, and 41-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Harriman et al (U.S. Pat. 6,244,765).

Harriman discloses:

- ***regarding claims 1, 18, 24***, a belt holder (80) attached to the carrier drive belt (78); and an isolator (95) coupled between said belt holder (80) and said printhead carrier (70), said isolator (95) being configured to provide directionally dependent filtering along a main scan direction of said printhead carrier (70) of vibrations propagating to said printhead carrier (70) (Figures 2-3; Column 6, Line 67 – Column 7, Line 3; Column 5, Line 55 – Column 6, Line 67)
- ***regarding claims 14, 21, 37***, isolator (95) having a center of mass, and a centerline of the belt holder (80) being spaced from said center of mass of said isolator (95) by a distance along a main scan direction of the printhead carrier (Figure 3)
- ***regarding claim 41***, a carrier drive belt; a belt holder attached to said carrier drive belt; an isolator coupled to said belt holder;
- a printhead carrier having a receptacle configured for mounting said isolator, said receptacle having a first thrust wall and a second thrust wall spaced apart

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from said first thrust wall along a bi-directional main scan direction of said printhead carrier, said isolator being retained between and in engagement with said first thrust wall and said second thrust wall, wherein a structural geometry of said second thrust wall is different than a structural geometry of said first thrust wall to adjust an amount of dampening in each direction along said bi-directional main scan direction to provide directionally dependent filtering of vibrations propagating to said printhead carrier (Figure 3; Column 5, Line 55 – Column 6, Line 67)



- **regarding claim 42**, bi-directional main scan direction including a direction toward a carrier motor and a direction away from said carrier motor (85), said second thrust wall being positioned closer to said carrier motor (85) than said first thrust wall (Figures 2-3; Column 6, Line 67 – Column 7, Line 3)
- **regarding claim 43**, the second thrust wall being shorter in length than said first thrust wall (Figure 3)
- **regarding claim 44**, second thrust wall being shorter in height than said first thrust wall (Figure 3)
- **regarding claim 45**, isolator being symmetrical (95) (Figure 3)

Response to Arguments

Applicant's arguments filed 5/16/2007 have been fully considered but they are not persuasive. Applicant argues that Harriman does not disclose an isolator being configured to provide directionally dependent filtering along a main scan direction. However, Harriman discloses an isolator (95) of elastomeric nature that allows stretching all directions and dampens vibrations in any direction. Harriman dampens vibrations in all directions, that would include the main scanning direction, and the dampening of vibrations is dependent on the direction of the printhead carrier. The isolator (95) may have different vibration characteristics dependent on the direction, but the isolator will still function and provide dampening of the vibrations in all directions.

Applicant argues that Harriman does not disclose an isolator that is coupled between the belt holder and the printhead carrier. However the carriage interface member (70) is joined to the rear surface of the carriage wall (65), thus the carriage interface member (70) is considered part of the printhead carriage/carrier. (Column 5, Lines 26-28)

Applicant argues that Harriman does not disclose a structural geometry of a second thrust wall different than a structural geometry of a first thrust wall. While patent drawings are not drawn to scale, relationships clearly shown in the drawings of a reference patent cannot be disregarded in determining the patentability of claims. See In re Mraz, 59 CCPA 866, 455 F.2d 1069, 173 USPQ 25 (1972).

Allowable Subject Matter

Claims 2-12, 13, 15-17, 19-20, 22-23, and 25-35, 36, 38-40, 46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The primary reason for the allowance of claims 2-12 is the inclusion of the limitation of an interface device of an isolator providing a first dampening of vibration when the printhead carrier is moved in a first direction and providing a second dampening of vibration different from first dampening of vibration when said printhead carrier is transported in a second direction opposite to said first direction. It is this limitation found in each of the claims, as it is claimed in the combination, that has not

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been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for the indicating allowable subject matter of claims 13 and 36 is the inclusion of the limitation of said isolator being an asymmetrical isolator and said printhead carrier defining a receptacle for receiving said asymmetrical isolator, said printhead carrier having a latch for engaging a latch slot formed in said asymmetrical isolator to retain said asymmetrical isolator in said receptacle. It is this limitation found in each of the claims, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for the indicating allowable subject matter of claims 15, 22 and 38 is the inclusion of the limitation of said isolator being made from multiple materials having different stiffness properties. It is this limitation found in each of the claims, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for the indicating allowable subject matter of claims 16, 23, 39 and 40 is the inclusion of the limitation of said isolator being made from a single material having multiple stiffness properties. It is this limitation found in each of the claims, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for the indicating allowable subject matter of claim 19 is the inclusion of the method step of providing a first dampening of vibration when the

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printhead carrier is moved in a first direction and providing a second dampening of vibration different from first dampening of vibration when said printhead carrier is transported in a second direction opposite to said first direction. It is this step found in each of the claims, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for the allowance of claims 25-35 is the inclusion of the limitation of an imaging apparatus of an isolator providing a first dampening of vibration when the printhead carrier is moved in a first direction and providing a second dampening of vibration different from first dampening of vibration when said printhead carrier is transported in a second direction opposite to said first direction. It is this limitation found in each of the claims, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

The primary reason for the indicating allowable subject matter of claims 20 and 46 is the inclusion of the limitation of said isolator being asymmetrical. It is this limitation found in each of the claims, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

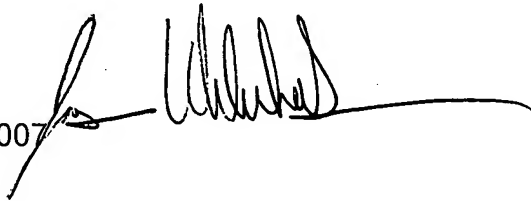
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Uhlenhake whose telephone number is (571) 272-5916. The examiner can normally be reached on Monday - Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JSU

July 19, 2007

A handwritten signature in black ink, appearing to be "JSU", written over the date "July 19, 2007".A handwritten signature in black ink, appearing to be "STEPHEN MEIER", written above the printed name.

STEPHEN MEIER
SUPERVISORY PATENT EXAMINER